**Diga Innovation Platform 8th Meeting Minute**

**Venue:** Woreda office of Agriculture

**Date:** November 7, 2013

**Starting time**: 9:30 AM

**Participant**: 34 IP members

**Facilitator:** Debela Kenea and Dereje Duressa

**Agenda:**

* Welcome address, introduction and briefing the agenda
* Opening remark from Diga woreda Administrator
* IP progress update
* Assessment of the IP progress or changes (from knowledge, attitude and skill perspective)
* Sharing PhD study key findings and solution phase exercise (Kebebe Ergano)
* Sharing RIU termite project experience (Wollega University)
* Fix the last IP (closing) meeting
* Rap up

1. **Welcome Address**

Mr. Debela Kenea, Coordinator of the EECMY-Nekemte DASSC has made a brief welcome address to all participant farmers, woreda line offices, regional and national research and academic institutions. He briefly reminded the participant the multiplication of the IP initiatives, the existing good cooperation and the learning and sharing of experience created among all stakeholders in due courses. He thanked the participant for coming and encouraged them to earnestly participate and contribute to the 8th regular meeting. He has also made introduction to new people and brief the agenda. Finally, he invited the guest of honor Diga district Administrator to make an opening remark.

1. **Opening Remarks**

Mr. Ulfina Shiferaw, Diga district Administrator welcomed gusts, people from sector offices farmers and experts to the 8th IP meeting. He said he has participated three times on the IP operational activity evaluation. People were asking the contribution of the NBDC program particularly the role of IP to the community. Prior to the IP field day another field day was organized and carried out by the woreda office of livestock agency at the IP intervention village. Apparently, unexpected resulted has been achieved through the contribution of the IP. He sincerely thanked for the achievement and solicits sustainable contribution from ILRI/IWMI and other partners’ institution to scale out the beneficial output of the intervention. He said that the woreda people generally surprised at the impact of the intervention in such a short period of time. Ulfina said given there will be sustainable technical support and commitment from the stakeholders; it is possible to scale out the initiatives. He remarked that the woreda has large livestock population particularly at lowland. Therefore, duplication of successful efforts across the district will be an inevitable. As a result, the prevailing livestock feed shortage and degraded land will be resolved. He urged the participant to scale out the lesson learned by fully committing to take the action forward. He said that despite the intermittent participation of the woreda administration at all process, we are fully committed to sustainably support your efforts and stand by you. Finally, by wishing the earnest participation and contribution from the stakeholders, he declared the 8th IP meeting is officially open. Before passing to the next session, the facilitator, Mr. Debela remarked the significance of good administration and direction for an impact to come and to ensure the sustainability of the initiatives.

1. **IP operational progress update**

Mr. Dereje Duressa, (Wollega University Community Service Director and member of the IP technical group) briefly presented below the operational progress of the IP since the 7th IP regular meeting.

* 1. **IP technical groups training on FEAST and FTNA**

The IP technical group was offered training on Feed Assessment Tools (FEAST) and Farmers Training Need Assessment (FTNA). The training was intended to capacitate the technical groups independently conduct respective assessment for the intervention sites. The pretest conducted at Welmera has also complemented the theoretical training. Overall, he said, “the offered training gave us the opportunity to get familiarized with new user friendly tools”.

* 1. **Assessment of livestock feed using FEAST**

A PRA focused group discussion with 15 farmers in three villages (Dapo, Denbi and Humbo) each and individual household survey with 9 farmers 3 each inclusive of gender from different typology that based on possession of land has been done to generate both qualitative and quantitative data. Accordingly, the following specific activities have been done.

* Data collected
* Data entered in to the FEAST template and analyzed
* Findings reported
* IP annual planning for 2013 enriched with the findings
* The exercise was scientific, participatory and serve as stepping stone for fodder related intervention
  1. **Identification of farmers training need**

Similar to the FEAST, Farmers Training Need Assessment for the three villages was conducted and reported. Accordingly, the need assessment for the training and type of technology has been prioritized and trainings were offered based on the assessment.

* 1. **Training of farmers**

Based on the farmers need assessment and the annual IP planning for the pilot villages, a couple of training were offered to 60 model farmers. Two comprehensive training mainly focused on (1) Production and management of livestock and (2) Forage Development, Management and use have been given to the target farmers. The training has opened ways to farmers to access pool of knowledge. The training that integrated with practical session enabled farmers capture skills for developing and managing fodder crop and rearing animals.

* 1. **Supplying of inputs**

To help the success of fodder development intervention, accessing farmers to various improved seeds and fertilizer were compulsory. Accordingly, six different improved fodder seeds and fertilizers has been introduced and distributed to the innovative farmers using the innovation fund. Type and quantity of the inputs are present on table 1 below. Currently, Desmodium and Desho grass are largely multiplied on woreda nursery for future dissemination.

|  |  |  |  |
| --- | --- | --- | --- |
| **Type of inputs** | **Unit** | **Quantity** | **Source** |
| Rhodes grass | Kg | 235 | Wollega University |
| Napier grass | Cut | 6000 | Woreda office of Agriculture |
| Chomo grass | Kg | 101 | EECMY |
| Desmodium | Kg | 0.6 | Bako ARC |
| Sesbania | Kg | 2.5 | Woreda office of Agriculture |
| Desho grass | Split | 3000 | Ginchi farmers |
| DAP | Quintal[[1]](#footnote-1) | 11 | WoA |
| Urea | Quintal | 5.25 | WoA |

WoA – woreda office of agriculture

* 1. **Organization of IP farmers field day**

The field day was organized on 6th November 2013. Sixty four participant including representative from IP member institutions, farmers from the pilot kebele and the RIU termite project kebeles (Lalisa Dimtu and Bikila), district livestock agency head and experts were strongly engaged. Commendable success has been achieved. The local and invited farmers and other stakeholders were highly delighted by the progress. Neighboring farmers from RIU termite project sites were solicited outreaching the initiative to their respective kebele. Generally, the field day created very good learning forum and experience swapping opportunity.

1. **Assessment of the IP development/changes**

The participant has made thorough assessment of the IP development from various dimensions. Changes in knowledge, attitude and skill took the major consideration. Above all, successful implementation and integration of land and water management activities with fodder development got substantial appreciation. The following points rose by farmers and experts/DAs/ are bullet pointed below.

**Experts/DAs/:**

* Timely supply of inputs and backstopping services was appreciated
* Farmers were proactively participated, learned lesson and actually utilized
* Termite management was possible through integrating multiple practices
* Degraded land get rehabilitated
* Soil fertility is getting improved
* Farmer generate income from the sale of seed/planting materials
* Feed reserve created for shortage period which is unusual for that agro ecology
* Farmers observed improved in milk yield whenever feeding Napier grass to their animal
* Attitude of farmers changed-adequate awareness created
* Forage/fodder extension fostered and outreached to wider beneficiaries
* Inspired by the role of IP, woreda livestock agency has disseminated additional seeds to farmers in 2013 using Agricultural Growth Program (AGP) fund
* Woreda livestock agency head promised to collect seed from innovative farmers as an incentive, given, the seed is clean for further dissemination (scaling out)
* Alternative biological (productive barriers) like Desho grass accessed for bund stabilization of the government land and water management program
* Improved fodder coverage in the three villages raise to 11-15 hectares of land
* Erosion controlled and land managed
* The agency appreciated the IP for the focus being given to the lowland kebeles of Diga which missed woreda’s attention despite possessing large livestock population
* The woreda office of livestock agency intended to use government’s termite project fund for expansion of Chomo and Desho grass
* Development Agents (DAs) were willing to provide sustainable backstopping to make sure necessary practices are used in growing fodder crop and afterwards management and use.

**Farmers:**

* Ideal situation was created for RIU termite project sites farmers to participate on the IP regular meeting
* Participation on the IP and the intervention has yielded tangible fruit (actual and attitude change)
* The objectives of farmers and experts met very well
* Farmers capable to produce fodder but look forward to generate income from the sale of product (either fattened animal or dairy products)
* Farmers training created huge opportunity to break resistance and then enhanced technology adoption
* Now, farmers are ready to adopt and scale up available technology
* Farmers from RIU termite project site recognized the demonstration on 60 farmers as woreda wide efforts
* Neighbor farmers learned the management and use of Rhodes grass
* Planting materials accessed, as a result, some farmers recognized Diga as feed/fodder/ rich district
* Newly joined IP member farmers appreciated the promising experience shared by the IP
* Arjo kebele chairman promised to organize additional visit and use the demonstration plot for showcasing to the wider resident of the kebele
* Farmers attribution to feed shortage and the resistant to AI services through estrus synchronization and introduction of cross breed animals in general is getting resolved
* Inspired by the IP, Arjo kebele chairman privately purchased fodder seeds for birr 500 to develop it further based on the acquired knowledge
* Bund stabilization and fodder development were concurrently practiced, it played role of government watershed management program
* Fodder development practically responded to termite management needs
* Water harvesting in ditch/level bund/ erode the subterranean termite gallery and has caused tangible effect to termite population (Enkossa’s experience)
* Farmers anticipated sustainability of the intervention to access and emulate best practice from the backstopping and mentor services
* IP member farmers solicited sustainability of the IP to transform the conventional ways of breeding animals to improved one using the AI services or through accessing to improved dairy breed
* Farmers thanked the IP plan and were promised to meet the target set out
* Awareness created, and resistance to fodder development reversed
* Performance of livestock changed particularly during feed scarce season
* Farmers anticipated access to improved breed and product market linkage (producer to consumer value-chain)

1. **Challenges**

Some important challenges of the intervention were mentioned by the participant as follow:

* Some volunteer farmers do not have oxen for land preparation
* Termite damaged Napier grass due to prevailing drought spell during planting
* Lack of uniformity in farmers level of perception
* Inconsistency in land preparation both in time and frequency of tillage
* Poor technicues of seeding and using proper rate
* Failure to manage fodder plot by some farmers
* Failure to harvest seed in time subject to birds damage and shattering effects
* Widespread free grazing practices affect sustainability
* Reduced farm size for some farmers retarded technology adoption
* Poor germination of Chomo grass that might need dormancy breaking period, hence deprive focus on Chomo development
* Farmers variably joined the innovation platform
* Conflict with non-participant farmers in fodder development largely attributed to free grazing excercise

1. **Sharing PhD study findings and conduct solution phase exercise**

**Stakeholders’ reflection on the research findings of the adoption of interrelated dairy technologies at Diga**

The key results from the research on “adoption of a package of dairy technologies in crop-livestock mixed farming systems” were presented to the IP meeting held at Diga on November 7, 2013. Over 34 stakeholders representing farmers, researchers from Bako Research Center, Wollega University, Mekenayesus Development Program, Diga district Livestock Agency, DAs, and the Administrative council were in attendance.

Kebebe distributed printouts of the key research findings to the participants and explained the results in detail. This was followed by reflections from the participants.

**Major reflections by stakeholders**

**Researchers**

The research is timely and the results reflect realities on the ground. The results on farm resources and use of technologies are comparable with other research findings such as FEAST. However, the study did not capture the influence of climatic factors on adoption of dairy technologies. For example, the hot and humid climate in low lands of Diga is favorable condition for multiplication of tsetse fly and infestation by trypanosomiasis. This hinders adoption of crossbred cows by farmers. In the regression, only number of oxen was considered. Why did not you include the number of cows as explanatory variable?

Lack of access to technological inputs (e.g. crossbred dairy cows) was not explicitly addressed in the study. For example, relatively higher number of farmers using crossbred dairy cows at Shambu as opposed to Diag can be explained by the fact that there was a government ranch at Shambu involved for many years in crossbreeding local Horo breed with Jersey and Holstein Friesian breeds. This gave better access to crossbred cows to the farmers at Shambu and relatively higher adoption rate.

Low adoption of artificial insemination is due to unreliable supply of complementary inputs such as semen, liquid nitrogen and other tools. These factors can discourage adoption of AI. However, these issues were not addressed in the study.

**Livestock Agency**

Livestock was not given priority in agricultural development plans. There is always a bias towards staples and industrial crops. Oromia region is a pioneer in establishing Livestock Agency as a semi-autonomous organization which deals mainly with livestock development. The agency was established only 5 years ago and the agency still lacks resources and government support. According to IWMI report, livestock was not mentioned in federal water resource use plan. This contrasts with the fact that livestock use a lot of water for feed production and drinking. Livestock can also contribute to environmental degradation and spoilage of water resources.

**Farmers**

Lack of access to dairy technologies is one of the major reasons why farmers are not using dairy technologies. But that is not clearly spelt out in your research. The purchase price of crossbreeds is very expensive for farmers. Most farmers do not afford to buy crossbred cows at a cost of Birr 20,000.

There is lack of awareness among farmers about dairy cows. There is also a long held wrong perception among farmers about crossbred dairy cows. Farmers consider crossbreds as insatiable eaters of forages and farmers cannot provide enough feed. Some farmers even think that crossbred cows can eat people if they are hungry. Fortunately, the negative attitude towards crossbreds is changing among farmers in recent years. There are also socio-cultural taboos against selling liquid milk. Only processed dairy products such as butter are marketed. These are some of the contributing factors for low level of adoption of dairy technologies at Diag. These issues are not considered in the study. Price fluctuation is another important issue discouraging farmers to engage in dairy. Due to the factors mentioned above, farmers have been reluctant to grow improved forages as feed crops for many years.

1. **Sharing RIU termite project experience**

Wollega University through its representative, Dereje Fekadu has updated the IP members the ongoing RIU termite project research activities on integrated termite management. Bikila and Lalisa Dimitu kebeles were the two candidate site for the study. Currently, the research with six different treatments on 30m2 of land each is underway by Wollega University in collaboration with ILRI. Baseline study was already conducted before the beginning of the action research. Termite used to be in the area for over 30 plus years but its effect is currently aggravated mainly due to soil degradation and poor soil fertility. Farmers’ practices were employed to manage the prevailing infestation. Among others, introducing and growing improved maize variety and haricot bean on cattle manure treated and on plots where stalk of maize and sorghum retained to mitigate the magnitude of termite damage.

The University has started the action research with 9 farmers in 2012. Currently, however, the number evolved to 16. Farmer selection was based on the willingness and exemplary of individual farmer on agricultural activities. The research groups were evaluating the performance of each treatment on regular basis. Based on the knowledge transfer from Makarare University, Wollega University is working on technology generation using stable/stalk/ management, manure application, et al. So far, promising result has been achieved. Particularly, plots treated with manure have become highly productive. Manure tends to enhance high biomass production and used as food for termite. As a result, the damage caused to the crop is largely reduced. The University will work on developing appropriate recommendation for the coming time. Simultaneously, the University advised farmers in research group and beyond to take forward successful practices as the major role should be played by the farmers themselves to bring reliable outcome/change. Overall, Dereje remarked that farmers’ attitude has been changed and the interest to be included as member of the research group is increasing.

1. **Fixing final IP meeting date**

After considering the importance of evaluating and formally ending the IP under the commission of NBDC program, the participant tentatively agreed to have one more IP meeting that is the 9th one on 27 December 2013.

1. **Rap up**

In the end Dereje Duressa, co-facilitator of the 8th IP meeting re affirmed University’s commitment to supply breed for the repeated queries emerged from the participant farmers under certain conditions mentioned to the innovative farmers. He has encouraged farmers to make sure the necessary requirement get ready and then present support (conformation) letter from woreda government line office as soon as possible. In addition, he responded to some additional questions arise from the participant, and appreciated all stakeholders and the IP member for their active participation and contribution to the 8th IP meeting. Finally, the meeting was wind up at 1:30 pm.

1. Quintal = 100kg [↑](#footnote-ref-1)